

*EPA Region 10
Report on*

Superfund



*Activities in Region 10 and the
State of Oregon*

May 2001



Superfund in Region 10 and the State of Oregon

The heart of our work in the Superfund Program is cleaning up and promoting reuse of contaminated sites. In Region 10 of the U.S. Environmental Protection Agency (EPA), we have completed cleanups at 51 of the 92 Superfund National Priorities List sites, and 22 of these have been removed from the List. We also complete about 30 emergency responses annually.

The Brownfields program is an important new part of our Superfund work. Over the past several years, working closely with our state partners, EPA Region 10 has funded twenty Brownfields assessment and showcase pilot projects at a cost of \$4.9 million. These grants have leveraged \$67 million in cleanup and redevelopment.

We continue to explore ways to improve our efforts to clean up hazardous waste sites as efficiently as possible, and to return sites to productive use while protecting human health and the environment. Being flexible in making cleanup decisions and improving cooperation with states, tribes, and local communities have contributed to our success. While we continue to face significant cleanup challenges in Region 10, I am proud of the progress we have made. I hope the information that follows is useful in answering your questions about hazardous waste cleanup activities in Region 10.

Michael F. Gearheard, Director
Office of Environmental Cleanup
EPA Region 10

Here's where to look for more information:

Site Assessments	page 1
Investigations determine if hazardous waste cleanup is needed at a site	
<i>Region 10's Superfund Assessments</i>	
http://yosemite1.epa.gov/r10/cleanup.nsf/sites/pa	
Partnerships with Tribes, States and Communities	page 2
Tribes, states, citizens and local governments' participation in cleanup is valued and encouraged through EPA's grants, training and technical assistance	
<i>For Tribes</i>	
http://yosemite1.epa.gov/r10/cleanup.nsf/sites/tribes	
<i>For States and Other Agencies</i>	
http://yosemite1.epa.gov/r10/cleanup.nsf/sites/state	
Brownfields	page 3
EPA encourages cleanup and re-use of properties that are abandoned or underused because of perceived or actual contamination	
<i>Brownfields in Region 10</i>	
http://yosemite1.epa.gov/r10/cleanup.nsf/sites/bf	
Trends in Region 10	page 7
Recurring hazardous waste concerns throughout our region include mining, sediments and emergency preparedness	
<i>Oil & chemical spill reporting</i>	
http://www.nrc.uscg.mil/index.html	
<i>Northwest Area Contingency Plan</i>	
http://www.uscg.mil/d13/m/nwac/nwac.htm	
What's Happening in Oregon?	page 8
Highlights of EPA activities in your state, including the latest news about Brownfields, site cleanups, and emergency response work	
<i>Region 10's Cleanup Site List</i>	
http://yosemite1.epa.gov/R10/CLEANUP.NSF/sites/cleanup	

EPA Region 10
1200 Sixth Avenue, Seattle, Washington
1-800-424-4EPA
Serving the states of Alaska, Idaho, Oregon and Washington

Demand for Site Assessment Remains High

We are responding to a growing number of requests for site investigations from tribes, communities, states and federal agencies. A cooperative approach using local knowledge and good science has proved effective in determining where cleanup action is needed. We also continue to conduct investigations in response to national priorities and immediate health threats.

Most sites are not placed on the National Priorities List. For those that are, EPA has access to federal Superfund dollars to conduct cleanup and strong regulatory authority to compel responsible parties to conduct cleanup. For sites with less serious contamination, which are not placed on the List, the Region plays a vital role in identifying the appropriate agency (e.g., state or federal agency) to oversee any necessary cleanup.

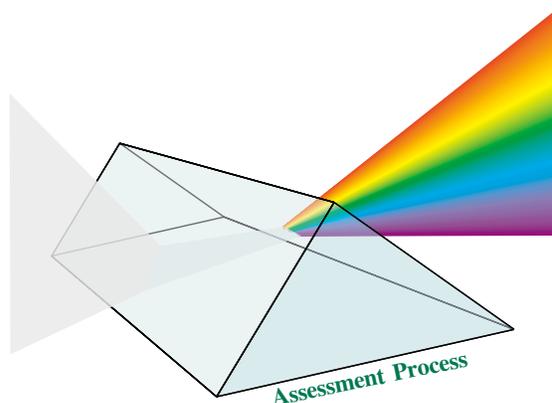
In 2000, the Site Assessment Program investigated more than 70 sites, including 23 vermiculite facilities, 25 Formerly Used Defense Sites, three Brownfields sites and Lake Roosevelt. The Region's actions at many of these sites set national precedents on how EPA works with tribes and communities.

Garibaldi, Oregon: EPA Action Lays Residents' Fears to Rest

When staff at the Oregon Department of Environmental Quality (DEQ) needed fast action at the Old Mill Marina in Garibaldi, they asked EPA for assistance. EPA quickly gained property access, informed the community of the investigation, and collected 108 soil, water, and sediment samples. EPA's sampling results assured DEQ and the community that no imminent public health threat was present. However, contaminants such as lead, mercury, arsenic and polychlorinated biphenyls (PCBs) may

EPA's Assessment Process helps identify the appropriate agency to lead cleanup, in response to a wide range of requests

Requests from:
 Tribes
 Communities
 State Agencies
 Federal Agencies
 Other EPA Programs
 Private Citizens



EPA Lead Cleanup

- Enforcement
- NPL
- Removal

State Lead Cleanup

- Voluntary
- Enforcement
- NPL

No Further Action



EPA technicians collect water samples in Chubbuck, Idaho to assess possible contamination from solvents

threaten fish, wildlife and plants. EPA is now working with DEQ to remove contaminated soils.

Dutch Harbor, Alaska: EPA Responds to State and Tribal Needs

After a private study of Dutch Harbor revealed PCBs in mussel tissue, the Alaska Department of Environmental Conservation (ADEC) asked EPA Region 10 to take action. The Region investigated, collecting more than 100 soil and sediment samples for environmental analysis. In a unique partnership with the Qawalangin Tribe, EPA and the tribe also collected samples from mussels, sea urchins, fish and sea lion blubber. EPA is now working with ADEC,

the City of Unalaska, the Qawalangin Tribe, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration to evaluate risks and move toward cleanup.



Samples taken in Unalaska, Alaska indicate that harbor sediments are contaminated with toxins such as PCBs, lead, dioxin, and petroleum.

North-Central Washington: "Mega-Site" Demands Mega-Cooperation

This summer, EPA will continue work on one of the largest site assessments the Region has ever done. The investigation will sample suspect areas including 70 mine sites and areas along 70 miles of the Upper Columbia River. Samples will also be taken in Canada, above all of the mine sites, to measure naturally occurring background levels.

EPA began the project in response to an urgent petition by the 12 Confederated Tribes of the Colville Indian Reservation and the Spokane Tribe, who fear that the contamination poses a public health threat. To tackle the project, EPA is cooperating with Environment-Canada, the British Columbia Ministry of Environment, Lands and Parks, the Tribes, Washington Department of Ecology (Ecology), community groups and federal trustees.

Action plans for the investigation are already in place. By integrating the project with ongoing Ecology work, developing up-front agreements with each tribe and simplifying paperwork, EPA was on site for preliminary screening work within two weeks of the Tribes' request. Said Flora Goldstein, Toxics Cleanup Program Manager at Ecology, "EPA's responsiveness to the Tribes and the speed at which the assessments are being conducted is very impressive."



Tribes have asked for EPA's help to assess possible contamination in Lake Roosevelt

Partnerships: A Foundation for Progress

Building Partnerships with States

Supporting States Through Funding

EPA continues to work closely with state environmental agencies, and is committed to these partnerships to achieve environmental progress. EPA funds a range of state cleanup programs:

- Preliminary Assessments/Site Investigations - funds for states to investigate sites to determine eligibility for the National Priorities List.
- Core Cooperative Agreements - funds for building basic Superfund program capacity.
- Voluntary Cleanup Programs - funds for building programs to support voluntary cleanup of sites by their owners.
- Multi-Site - funds that state programs can use to support EPA work on NPL sites.
- Site-Specific - funds for investigating or cleaning up specific sites.

Teaming Up to Get the Job Done At very large, complicated sites, EPA teams up with state programs. For example, Washington Department of Ecology and EPA share the lead role for cleaning up the Commencement Bay site in Washington. Ecology has the lead for addressing contaminant sources, and EPA has the lead for in-water cleanup. A similar arrangement with Oregon Department of Environmental Quality was recently established for the Portland Harbor site in Oregon.

Both Washington and Oregon also manage Superfund sites under their own environmental laws. The state of Washington is managing 18 Superfund sites, and the state of Oregon is currently managing the Union Pacific Railroad Tie Treatment and McCormick & Baxter Creosoting sites. Both states are expected to work on more sites in the future.

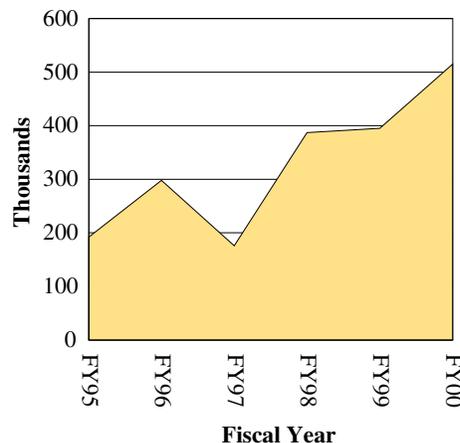
Building Partnerships with Tribes

Ramping Up Government-to-Government Consultation

A new area of emphasis for Superfund is consultation with tribal governments whenever an EPA action may affect tribal interests or resources. There are over 270 federally recognized Indian tribes in Region 10, nearly half of all the tribes in the United States. The Region has developed a strategy and guidelines for tribal consultation, as well as individual agreements with nine tribes. These facilitate early and effective tribal involvement and allow the cleanup process to run more smoothly.

Supporting Tribes With Funds Seventeen tribes and a consortium of 176 Alaskan villages will receive funding this year to participate in technical aspects of site cleanup. EPA Region 10 will continue to support this program at the highest possible level within budget constraints.

EPA's funding for tribes has doubled



Tribes with funding agreements include:

Alaska Inter-Tribal Council
 Coeur D'Alene
 Colville
 Grand Ronde*
 Muckleshoot*
 Nez Perce
 Puyallup
 Qawalangin
 Shoshone-Bannock
 Siletz*
 Spokane
 Suquamish
 Swinomish
 Tulalip
 Umatilla*
 Village of Tanacross
 Warm Springs*
 Yakama*

* New cooperative agreements anticipated this year

Building Partnerships With Communities

EPA strives to give community members meaningful opportunities to be involved in its decision making process. Public participation in Superfund goes far beyond required hearings and comment periods. Site-specific Community Involvement Plans ensure that communities get the information they want, have the opportunities they desire to provide input on decisions, and feel confident that their views are considered. EPA also supports the formation of community groups and provides funding for independent experts to help groups interpret technical data, understand site hazards, and become more knowledgeable about cleanup technologies.

Technical Assistance Grant Brings Community Issues to the Table

At the Wyckoff/Eagle Harbor Superfund Site in Bainbridge Island, Washington, the input of a community group working under an EPA

grant enhanced site cleanup plans. At the group's urging, EPA altered its schedule to complete noisy construction in the winter when residents were more likely to have windows closed and be indoors. In response to traffic safety concerns, EPA changed the site's road configuration. The group is helping shape plans for buffer zones around the site.



EPA meets with residents concerned about hazardous wastes affecting the Duwamish River

Citizen Group Influences EPA Decision-Making Citizens for a Healthy Bay is another example of a successful community group in Region 10. Due to this group's persistence and passion, and EPA's commitment to considering local concerns, EPA improved plans for disposal of contaminated sediments at the Commencement Bay site in Tacoma, Washington. Instead of placing contaminated sediments in a waterway fronted by a residential area, EPA adopted the citizen group's proposal to dispose of them at an upland landfill. EPA and Citizens for a Healthy Bay have maintained a positive, constructive working relationship for years, and that relationship continues to pay off in a tangible way.



A School group learns more about Cleanup plans for the Duwamish River

EPA Brownfields Program: Tools Help Communities Assess, Clean Up and Redevelop Brownfields Properties

Brownfields are properties that are abandoned or under-used because of real or perceived environmental contamination. Potential liability for the pollution can make development, sale, or expansion of a property complicated.

EPA's Brownfields Program is not just about restoring contaminated properties. It's about protecting public health and the environment, and adding vitality and strength to communities. One way of doing this is providing the right tools to help communities assess, clean up, and reuse or redevelop abandoned or under-used properties.

Assessing Brownfields Properties

Bellingham, Washington: Assessing Properties & Leveraging Funds

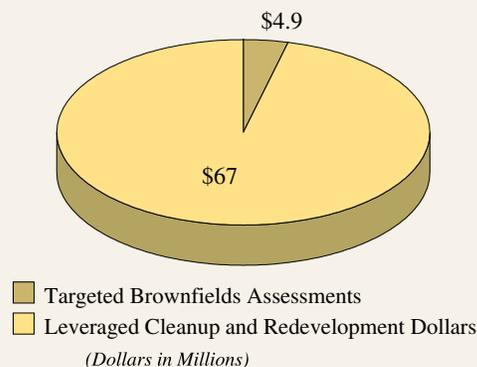
In one pilot project, the Port of Bellingham completed Brownfields assessments on ten properties. These assessments prompted \$1.6 million in cleanup and \$14 million in redevelopment.

EPA Performs Brownfields Assessments

Under the Targeted Brownfields Assessments program, EPA conducts assessments for communities to clarify how cleanup will be done to redevelop abandoned or under-used properties. Region 10 has completed over 20 assessments to date, totaling over \$1 million in assistance.

\$4.9 million for Brownfields assessments prompted \$67 million in cleanup and redevelopment.

Twenty Assessment/Showcase Pilot Projects provide more than \$4.9 million in funding assistance. These competitive grants are awarded to communities to investigate and plan for cleanup and redevelopment of under-used sites. Showcase communities are also assigned a federal employee to help coordinate efforts and create partnerships with other agencies and private developers.



The City of Bellingham Assessment Pilot Project targets a 43-acre municipal landfill along Whatcom Creek. The City has completed assessment work on six out of ten targeted properties.

Brownfields and Redevelopment

Cleaning Up Brownfields Properties

Training a Future Workforce: Region 10 Has Awarded Two Job Training Grants, totaling \$347,500. This competitive grant program offers communities funding to provide training for hazardous waste cleanup. Local residents can learn skills for new jobs in the hazardous waste industry. Region 10's job training programs have enrolled over 69 students, 49 of whom have completed training and obtained employment.

Providing Funding for Cleanups: \$3.5 Million awarded for three Revolving Loan Fund Pilots The Brownfields Revolving Loan Fund Program is a competitive grant program, available to communities interested in offering low interest loans for cleanups at abandoned or under-used properties.

Assisting State Cleanup Programs: \$3.4 Million Provided to Region 10 States; Over 4,000 Properties Have Entered State Programs. EPA awards non-competitive grant funding to states to help set up and run Voluntary Cleanup Programs (VCPs). VCPs provide ways for owners and operators of under-used properties to efficiently investigate and safely clean up their sites with minimal state oversight. Through environmental cleanup, VCPs facilitate the use, sale, refinancing, and/or redevelopment of under-used properties.

Redeveloping Brownfields Properties and Superfund Sites

In the early years of the Superfund program, once a site was cleaned up, it was often left fenced and unused. Now, here in Region 10 and nationally, EPA strives to select site cleanup solutions that return a property to usable condition.

Supporting Superfund Site Redevelopment: Region 10 has awarded two Superfund Redevelopment Pilots with total funds of \$199,665. The Redevelopment Initiative is a program where EPA works with communities to return contaminated sites to productive use. This initiative includes a pilot program providing financial and technical assistance for communities to determine the future reuse of a site.

Asarco Smelter Site being Readied For Reuse



Asarco before



Cleanup in progress



Artist's rendering of site redevelopment

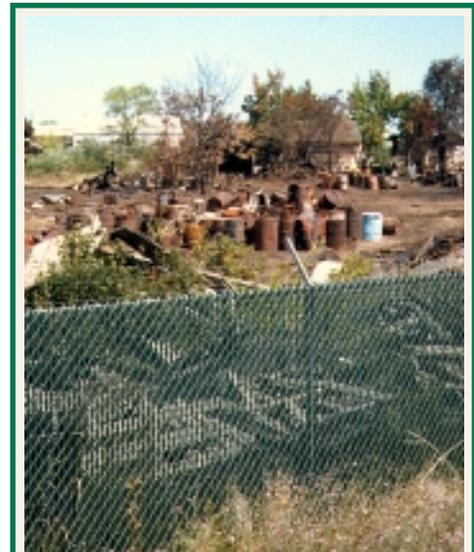
Boasting some of the Puget Sound area's most spectacular waterfront views, the former Asarco smelter is now slated for housing and light industry.

After a massive site cleanup effort and with the implementation of stringent land use controls, the 100 acre site will be safe and ready for redevelopment.

Almost a century of copper smelting operations at Asarco had contaminated the site and offshore sediments with copper, arsenic and other metals. Now the company is working to cleanup the site under an agreement with EPA. Cleanup of the property began with a bang in 1993 when the 560 foot high smelter stack was brought down, starting the demolition of the smelter's buildings and structures.

The last phase of site cleanup began in 1998. Contaminated soil will be placed in an on-site hazardous waste landfill and the entire site will be capped. Contaminated offsite sediments will be excavated or capped with clean sediments. Cleanup is scheduled for completion in 2005.

Spokane Junkyard to Become Sports Complex



The junkyard before cleanup



Cleaned up site ready for re-development

After years as a neighborhood eyesore, a 16 acre junkyard will soon be a youth sports complex and center for neighborhood pride.

The site, in the Hillyard neighborhood of Spokane, was contaminated with PCBs, lead and solvents from 50 years of metal recycling,

The area has now been planted with grass, and a parking lot has been installed over the hazardous waste containment cell. Construction of the sports complex will be completed by Spring 2002. As a result of the cleanup, much needed affordable housing has been constructed north of the property.

Region 10 Trends

We are working closely with tribes, states, and other federal agencies to address contaminated sediments and mining wastes throughout Region 10, and to improve our emergency response capabilities.

Mining and Superfund in the Pacific Northwest

From abandoned mercury mines in Alaska, to gold and silver mines in Idaho, releases from mine sites have impaired the use of surface waters, contaminated soils and sediment, polluted groundwater resources, and destroyed habitat. Mining impacts are not limited to those from historic mining



Smelter wastes containing up to 12% arsenic near Bunker Hill have been removed to a safe containment facility.

practices: several modern mines in the Region pose significant environmental threats.

Superfund authorities have been instrumental in achieving privately funded cleanup of residential properties contaminated with arsenic from the Asarco Smelter in Tacoma, Washington, as well as lead contaminated properties in the Silver Valley of northern Idaho. Investigations at mine sites in Oregon and Washington assessed the impact of mining on surface waters. Cleanups at a number of mines sites, including the Douglas Mine in Idaho and the Kaaba-Texas mine in Washington, were federally financed.

Cleaning Up Contaminated Sediments

Across the Northwest, Region 10 is making progress in investigating and cleaning up contaminated sediments. These sediments threaten fish and bottom-dwelling organisms which can accumulate toxic compounds and pass them up the food chain. Sediment areas are often ecologically sensitive, and may include habitat for salmon and other threatened species. Our natural resource-based economy depends on a healthy and productive marine and freshwater environment.



Regular spill drills ensure that EPA and the states are ready to respond to emergencies

Cleaning up contaminated sediment sites presents unique challenges. Because the contamination is typically spread over large areas and comes from many sources, investigations, cleanup plans, and legal settlements can be complicated. Tribes and other ethnic groups who depend on fish as a major food source must be included in every phase of the clean-up. When these sites are in active industrial port areas, investigation and cleanup must coexist with active businesses, port facilities, and navigational dredging projects.

EPA's Emergency Response Program

In Region 10, ten On-Scene Coordinators (OSC) direct federal response to oil spills, hazardous materials incidents, natural disasters and terrorist incidents. A large part of OSC time is spent on planning, training, and doing outreach with local, state, and other federal responders.

EPA practices handling chemical emergencies with industry and local governments. When the worst happens such as train derailments, tank truck accidents, oil spills or chemical fires, EPA is ready for emergency response.

Spills Keep Response Teams Busy

Region 10 receives as many as 2,000 phone calls a year which include notifications of spills, air releases, and requests for assistance. EPA conducts actual response actions 30 to 50 times each year (roughly 2% of the incoming calls).

Oil and Hazardous Materials Drills

During the last 15 months, EPA Emergency Response staff in Washington, Oregon, and Idaho have participated with industry in 23 oil and hazardous materials drills, including drills with area refineries, Olympic Pipeline, five counter-terrorism drills, and one exercise with the Oregon Chemical Weapons Depot.

What's Happening in Oregon?

The State of Oregon is actively involved in Brownfields assessment, cleanup and redevelopment. Over \$3.8 million has been directed to Oregon communities.

Tri-County Metropolitan Transportation District Assessment Pilot New jobs will be created in three economically disadvantaged neighborhoods in Portland through redevelopment and reuse of Brownfields sites. The Tri-Met pilot project identified sites near the transit corridor which were suitable for transit industries and other industries dependent on transit. Five of the sixteen sites assessed were selected for further work and development.

Coos Bay Assessment Pilot, Oregon Tourism will play a key role on the waterfront of Coos Bay, as retail and other commercial activities bring new vigor to the formerly industrial area. Brownfields reuse and redevelopment plans are focused on a 10-square block area along Front Street. A boardwalk along the estuary shore and a maritime museum celebrating the area's history are being considered for the area. To date, assessment of contamination has been completed for 25 of approximately 35 privately owned parcels.

EPA Awards \$1.5 million to Oregon Coalition Access to low interest loans has been identified as a critical need for successfully cleaning up abandoned or under-used sites. This pilot project will capitalize a revolving loan fund to help owners and communities across the state clean up under-used properties. EPA is working on this cooperative effort with the Oregon Economic and Community Development Department (OECDD), the City of Coos Bay, and the Tri-County Metro Transit District.

Moving Toward Portland Harbor Cleanup



EPA will need to work closely with the ship industry to achieve an effective cleanup



St. Johns Park is one of many recreation areas along the river

Portland Harbor is a step closer to cleanup, now that a six-mile reach of the Willamette River was listed on the National Priorities List in December 2000. EPA expects to start the in-water investigation this year, and investigation of upland properties continues under Oregon Department of Environmental Quality leadership. A preliminary health assessment is anticipated in July. EPA and Oregon Department of Environmental Quality are jointly developing a public involvement strategy to create opportunities for meaningful community participation in the planning process.

The Harbor is a thriving commercial port and a popular fishing and boating area. The Willamette River provides a critical migratory corridor and habitat for endangered steelhead and chinook salmon and is an important cultural resource for six tribes. However, river sediments are contaminated with heavy metals, pesticides, PCBs and petroleum products from historical disposal practices at many industrial facilities and contaminants from combined sewer outfalls.

EPA Takes Swift Action to Assess Threats from Contaminated Mines



Surface water contaminated with heavy metals may pose risks in the Upper Powder River

At the request of the Oregon Department of Environmental Quality (DEQ), in Summer 2000, EPA conducted a basin-wide study of 11 historic gold and silver mines near Sumpter in Baker County, Oregon. Said John Dadoly of DEQ, "Without EPA's help, the state would have taken decades to conduct this watershed-level study, which is a top priority for the state, and vital to protecting fish, plants and people."

Conducted in partnership with DEQ and the Forest Service, the study revealed water, soil and sediments contaminated with heavy metals such as arsenic, chromium, mercury, lead and selenium. This summer, EPA and the Forest Service are teaming up to analyze fish tissue. Results of this work will enable the agencies to develop a management plan for the entire watershed.

Improved Response time to Local Emergencies

A new EPA On-Scene Coordinator (OSC) in Portland is improving emergency response capabilities, completing our goal of having at least one OSC in each state. The OSC is improving communication with our state and local counterparts, and improving response time to emergencies.

EPA led two major spill cleanups in December 2000, and during the past 10 months was involved in four emergency responses: the Hanford Fire, 15 Mile Creek herbicide spill in The Dalles, Aircraft Services International Group jet fuel spill at the Portland Airport, and the Yaquina River fuel oil spill in Toledo, Oregon. The Portland OSC was the first responder on the scene in the latter three spills.

Oil Spill Exercises: Plan and Practice

EPA provided oversight in oil and hazardous materials exercises at the Hood River County Emergency Responder/Columbia River Drill and at the U.S. Army Corps of Engineers First Responders Table Top Exercise in The Dalles.



EPA Emergency Response experts offered technical assistance at the town of Cottage Grove where 300 gallons of hydrofluoric acid spilled from a truck.

Trailer Spills Herbicide, Killing Aquatic Life and Causing Fire



Emergency responders installed a dam to stop contamination from spreading downstream.

Jugs of herbicide were spilled on the roadway and in the creek when a tractor trailer lost part of its load near the Fifteen Mile Creek bridge, at the confluence of Fifteen Mile Creek and the Columbia River. The Fire Department responded to a "small fire" in this August, 2000 incident. The Gresham County Hazardous Materials Team closed I-84 in both directions and the fire was allowed to burn out.

A total of 1,047 herbicide jugs burned or spilled. All aquatic life (trout, lamprey, crayfish and invertebrates) was killed in 400 yards of creek. Responders isolated the contamination and by-passed clean creek water to the Columbia River, closed fishing and the beach, and stopped irrigation.

Region 10 Cleanup

<http://yosemite1.epa.gov/r10/cleanup.nsf/sites/cleanup>

Oregon Department of Environmental Quality's Cleanup Program

<http://www.deq.state.or.us/wmc/cleanup/clean.htm>

